Federal Operating Permit
Article 1

DRAFT

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	University of Virginia
Facility Name:	University of Virginia
Facility Location:	University of Virginia Campus Charlottesville, Virginia
Registration Number:	40200
Permit Number:	VRO40200

_____
Effective Date

_____
Expiration Date

_____
Robert G. Burnley
Director, Department of Environmental Quality

_____
Signature Date

Table of Contents

I. Facility Information

Permittee
University of Virginia
Charlottesville, Virginia

Responsible Official
Leonard W. Sandridge, Jr.
Executive Vice President and Chief Operating Officer

Facility
University of Virginia
P. O. Box 400228
Charlottesville, VA 22904-4228

Contact Person
Mr. Jeffrey A. Sitler, CPG
Environmental Compliance Manager
(434) 982-4901

AFS Identification Number: 51-540-0003

Facility Description:

SIC Code	Manufacturing Description
8221	Colleges/Universities

The University of Virginia (UVA) is a publicly funded institute for higher education located in Charlottesville, Virginia. UVA is an extensive campus with facilities including classrooms, dormitories, laboratories, medical center, athletic complexes, research facilities, and various support facilities. Emissions sources at UVA consist of a Main Heating Plant (MHP), a coal handling system, other fuel burning equipment, electrical generators, woodworking equipment and medical equipment.

Main Heating Plant

The MHP currently consists of a total of five boilers of differing sizes to produce steam for heat and related university operations:

- Union Iron Works Coal-Fired Boiler with a maximum rated heat input capacity of 50 MMBtu/hr (Boiler No. 1)
- IBW Coal and Natural Gas-Fired Boiler with a maximum rated heat input capacity of 95 MMBtu/hr (Boiler No. 2R)

- Union Iron Works Coal-Fired Boiler with a maximum rated heat input capacity of 90 MMBtu/hr (Boiler No. 3)
- Keeler Natural Gas and Residual Oil-Fired Boiler with a maximum rated heat input capacity of 112.5 MMBtu/hr (Boiler No. 4)
- Keeler Coal and Natural Gas-Fired Boiler with a maximum rated heat input capacity of 112.5 MMBtu/hr (Boiler No. 5)

Coal Handling System

Coal is transported to the coal handling facility mostly via railcar, although a small amount is delivered by trucks. The coal handling system consists of four coal silos, four coal bunkers and miscellaneous coal conveyors and coal handling equipment.

Other Fuel Burning Equipment

Due to the extensive nature of the UVA academic campus it is not feasible for the Main Heating Plant to provide heat and steam to all of the contiguous buildings. Therefore, some facilities maintain separate furnaces and small boilers for the purposes of providing building heat and hot water. These smaller units burn either distillate oil or natural gas.

Electrical Generators

UVA maintains emergency electrical generators. The generators are fueled with diesel fuel, natural gas or No. 2 fuel oil. The generators range in size up to 1500 kilowatts. Operation of each emergency electrical generator is less than 500 hours per year.

Woodworking Equipment

Maintenance activities performed at UVA include woodworking. Manufacturing of wood furniture takes place at the Facilities Maintenance-Cabinet Shop. Small-job painting and finishing are performed in addition to woodworking activities. The actual woodworking operations generate particulate emissions, which in the case of the Facilities Maintenance-Cabinet Shop vent through a fan system with a filter.

Medical Equipment

UVA maintains two ethylene oxide sterilizers for hospital use. The sterilizers are located at the University's hospital and are used to sterilize various surgical and other medical equipment. These sterilizers are exempt from Subpart O MACT requirements under 40 CFR 63.360 (e).

II. Emission Units

Equipment to be operated consists of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Main Heating Plant							
7103-1-01	7103-1	BOILER 1 – Union Iron Works (1951) (Coal)	50 Million BTU/HR	Cyclone Union Iron Works	7103-CY1	PM-10 Lead	8/5/94 (Amended 3/9/95)
7103-1-02R	7103-1	BOILER 2R – IBW (1987) (Coal) BOILER 2R – IBW (1987) (Natural Gas)	95 Million BTU/HR	Baghouse Amerex Custom construction	7103-BH1	PM-10 Lead	8/5/94 (Amended 3/9/95)
7103-1-03	7103-1	BOILER 3 – Union Iron Works (1969) (Coal)	90 Million BTU/HR	Cyclone Union Iron Works	7103-CY2	PM-10 Lead	8/5/94 (Amended 3/9/95)
7103-1-04	7103-1	BOILER 4 – Keeler (1971) (#6 Fuel Oil) BOILER 4 – Keeler (1971) (Natural Gas)	112.5 Million BTU/HR	-	-	-	8/5/94 (Amended 3/9/95)
7103-1-05	7103-1	BOILER 5 – Keeler (1989) (Coal) BOILER 5 – Keeler (1989) (Natural Gas)	112.5 Million BTU/HR	Baghouse Zurn Custom construction	7103-BH2	PM-10 Lead	8/5/94 (Amended 3/9/95)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Coal Handling System							
7103-CH1	7103-CH1	Coal Handling, Unloading, and Storage – coal silos, coal conveying & unloading equipment, enclosures for bunkers	5550 tons	Bin Vent/Dust Filter Dynamic Air Series 343, 1 (one) Model 900 and 4 (four) Model 600	7103-BH3	PM-10	2/14/86
Other Fuel Burning Equipment							
0207-1-01	0207-1	Superior Model #G4RB40A (1956) (#2 Fuel Oil) Superior Model #G4RB40A (1956) (Natural Gas)	1.4 Million BTU/HR	-	-	-	-
0207-1-02	0207-1	Superior Model #G4RB40A (1956) (#2 Fuel Oil) Superior Model #G4RB40A (1956) (Natural Gas)	1.4 Million BTU/HR	-	-	-	-
0580-1-01	0580-1	Columbia Model #WL140 (1990) (#2 Fuel Oil) Columbia Model #WL140 (1990) (Natural Gas)	1.2 Million BTU/HR	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
0580-2-01	0580-2	Cleaver Brooks Model # CB 200-40 (1970) (#2 Fuel Oil) Cleaver Brooks Model # CB 200-40 (1970) (Natural Gas)	1.7 Million BTU/HR	-	-	-	-
0603-1-01	0603-1	Weil-McLain Model # 788 (1991) (#2 Fuel Oil) Weil-McLain Model # 788 (1991) (Natural Gas)	1.6 Million BTU/HR	-	-	-	-
1600-1-01	1600-1	NRC Model #9-47 (1991) (#2 Fuel Oil)	1.1 Million BTU/HR	-	-	-	-
5576-1-01	5576-1	Cleaver Brooks Model #CB 428-300 (1964) (#2 Fuel Oil) Cleaver Brooks Model #CB 428-300 (1964) (Natural Gas)	12.6 Million BTU/HR	-	-	-	-
5576-1-02	5576-1	Cleaver Brooks Model #CB 428-300 (1964) (#2 Fuel Oil) Cleaver Brooks Model #CB 428-300 (1964) (Natural Gas)	12.6 Million BTU/HR	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
5577-1-01	5577-1	MCCUE Kewanee Model #L3W-250-GD2 (1990) (#2 Fuel Oil) MCCUE Kewanee Model #L3W-250-GD2 (1990) (Natural Gas)	10.7 Million BTU/HR	-	-	-	3/29/90 (Amended 11/14/90)
7533-1-01	7533-1	FLO-KNTRL #1 (1973) (Natural Gas) FLO-KNTRL #1 (1973) (#2 Fuel Oil)	15 Million BTU/HR	-	-	-	-
7533-1-02	7533-1	FLO-KNTRL #2 (1973) (Natural Gas) FLO-KNTRL #2 (1973) (#2 Fuel Oil)	15 Million BTU/HR	-	-	-	-
Electrical Generators							
0068-1-01	0068-1	500ROZD4/Gen 5M4027 Emergency generator (2003)(Diesel)	500 kW	-	-	-	-
1142-1-01	1142-1	G.E. (G) 1500 DFMB Emergency generator (Diesel)	500 kW	-	-	-	-
1142-2-01	1142-2	G.E. 8DA Emergency generator (Diesel)	1500 kW	-	-	-	-
1148-1-01	1148-1	Caterpillar 3512TA Emergency generator (Diesel)	750 kW	-	-	-	-
1148-2-01	1148-2	Caterpillar 3512TA Emergency generator (Diesel)	750 kW	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
1148-3-01	1148-3	Caterpillar 3512TA Emergency generator (Diesel)	750 kW	-	-	-	-
1148-4-01	1148-4	Caterpillar A6511-20-24V-A Emergency generator (Diesel)	1100 kW	-	-	-	-
1155-1-01	1155-1	DFLE-4492628 Emergency generator (2002)(Diesel)	1500 kW	-	-	-	-
1196-1-01	1196-1	500DFFB Emergency generator (Diesel)	500 kW	-	-	-	-
3761-1-01	3761-1	WA-9675-0202 Emergency Generator (2001)(Diesel)	1500 kW	-	-	-	-
7103-2-01	7103-2	Caterpillar Model #SR-4 Emergency generator (1986) (Diesel)	1250 kW	-	-	-	11/17/03
7185-1-01	7185-1	1500ROZD4 Emergency Generator (2001)(Diesel)	1500 kW	-	-	-	-
Woodworking Equipment							
0245-1-01	0245-1	Cabinet Shop: Facilities Maintenance – saws, belt sanders and other woodworking and finishing equipment	-	National System Model NSGV 3415 (2001)	0245-BH1	PM-10	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Medical Equipment							
1150-1-04	1150-1	Ethylene Oxide Sterilizer 3M Model 400DGP	100g EtO/ 14 hrs	-	-	-	11/17/03
1150-1-05	1150-1	Ethylene Oxide Sterilizer 3M Model 487AGP	100g EtO/ 14 hrs	-	-	-	11/17/03

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Main Heating Plant

A. Limitations

1. Each boiler (Ref. 7103-1-01, 7103-1-2R, 7103-1-03, 7103-1-04 and 7103-1-05) shall consume no more than the following amounts of fuel per year, calculated monthly as the sum of each consecutive 12-month period:

Boiler Number	Approved Fuel Type	Quantity Allowed
1	Coal	515 tons/yr
2R(1)	Coal	14,000 tons/yr
	Natural Gas	354.67 x 10^6 SCF
3	Coal	4,000 tons/yr
4	#6 Oil	70,150 gallons
	Natural Gas	150.0 x 10^6 SCF
5(2)	Coal	10,000 tons/yr
	Natural Gas	253.33 x 10^6 SCF

(1) The combination of coal and natural gas burned in Boiler 2R shall not to exceed 3.724 x 10^{11} BTU/yr.
(2) The combination of coal and natural gas burned in Boiler 5 shall not to exceed 2.66 x 10^{11} Btu/year.

(9 VAC 5-80-110 and Condition I.4 of 3/9/95 Permit Amendment)

2. Emissions from the operation of Boiler 1 (Ref. 7103-1-01) shall not exceed the limits specified below:

Particulate Matter	0.43 lbs/10^6 BTU	21.59 lbs/hr	3.08 tons/yr
Sulfur Dioxide	1.64 lbs/10^6 BTU	82.12 lbs/hr	11.23 tons/yr
Volatile Organic Compounds		0.13 lbs/hr	0.02 tons/yr
Nitrogen Oxides	0.60 lbs/10^6 BTU	30.0 lbs/hr	4.11 tons/yr
Carbon Monoxide	0.19 lbs/10^6 BTU	9.4 lbs/hr	1.30 tons/yr

(9 VAC 5-80-110, 9 VAC 5-40-900, 9 VAC 5-40-910 and Condition I.5 of 8/5/94 Permit)

3. Emissions from the operation of Boiler 2R (Ref. 7103-1-2R) shall not exceed the limits specified below:

Particulate Matter	0.05 lbs/10^6 BTU	4.75 lbs/hr	9.31 tons/yr
Sulfur Dioxide	1.64 lbs/10^6 BTU	155.94 lbs/hr	305.37 tons/yr
Volatile Organic Compounds		0.25 lbs/hr	0.50 tons/yr
Nitrogen Oxides	0.60 lbs/10^6 BTU (30-day rolling average)	57.0 lbs/hr	111.72 tons/yr
Carbon Monoxide	0.19 lbs/10^6 BTU	18.25 lbs/hr	35.38 tons/yr

(9 VAC 5-80-110 and Condition I.6 of 8/5/94 Permit)

4. Emissions from the operation of Boiler 3 (Ref. 7103-1-03) shall not exceed the limits specified below:

Particulate Matter	0.43 lbs/10^6 BTU	38.86 lbs/hr	23.94 tons/yr
Sulfur Dioxide	1.64 lbs/10^6 BTU	147.64 lbs/hr	87.25 tons/yr
Volatile Organic Compounds		0.24 lbs/hr	0.14 tons/yr
Nitrogen Oxides	0.60 lbs/10^6 BTU	53.94 lbs/hr	31.92 tons/yr
Carbon Monoxide	0.19 lbs/10^6 BTU	16.90 lbs/hr	10.11 tons/yr

(9 VAC 5-80-110, 9 VAC 5-40-900, 9 VAC 5-40-910 and Condition I.7 of 8/5/94 Permit)

5. Emissions from the operation of Boiler 4 (Ref. 7103-1-04) shall not exceed the limits specified below:

Particulate Matter	0.14 lbs/10^6 BTU	15.8 lbs/hr	0.9 tons/yr
Sulfur Dioxide	2.09 lbs/10^6 BTU	235.1 lbs/hr	11.0 tons/yr
Volatile Organic Compounds		1.1 lbs/hr	0.12 tons/yr
Nitrogen Oxides	0.52 lbs/10^6 BTU	58.5 lbs/hr	43.6 tons/yr

Carbon Monoxide	0.04 lbs/10^6 BTU	4.5 lbs/hr	3.2 tons/yr

(9 VAC 5-80-110 and Condition I.5 of 3/9/95 Permit Amendment)

6. Emissions from the operation of Boiler 5 (Ref. 7103-1-05) shall not exceed the limitations specified below:

Particulate Matter	0.05 lbs/10^6 BTU	5.63 lbs/hr	6.65 tons/yr
Sulfur Dioxide	1.64 lbs/10^6 BTU	184.77 lbs/hr	218.12 tons/yr
Volatile Organic Compounds		0.30 lbs/hr	0.35 tons/yr
Nitrogen Oxides	0.60 lbs/10^6 BTU (coal) (30-day rolling average) 0.20 lbs/10^6 BTU (natural gas) (30-day rolling average)	67.51 lbs/hr	79.80 tons/yr
Carbon Monoxide	0.19 lbs/10^6 BTU	21.15 lbs/hr	25.27 tons/yr

(9 VAC 5-80-110, 40 CFR 60.43b-60.44b and Condition I.6 of of 3/9/95 Permit Amendment)

7. NO_X emissions from the operation of Boiler 5 (Ref. 7103-1-05) while simultaneously combusting coal and natural gas shall not exceed the limitation specified below:

$$E_n = \left(EL_g * H_g\right) + \left(EL_c * H_c\right) \div \left(H_g + H_c\right)$$

…….Equation 1

Where:

E_n = NO_X emission limit (expressed as NO_2) in lbs/MMBtu
EL_g = NO_X emission limit (expressed as NO_2) from combustion of natural gas in lbs/MMBtu as defined in Condition III.A.6
H_g = heat input from combustion of natural gas in lbs/MMBtu
EL_c = NO_X emission limit (expressed as NO_2) from combustion of coal in lbs/MMBtu as defined in Condition III.A.6
H_c = heat input from combustion of coal in lbs/MMBtu

(9 VAC 5-80-110 and 40 CFR 60.44b)

8. Particulate emissions from the boilers (Ref. 7103-1-2R and 7103-1-05) shall each be controlled by a baghouse (Ref. 7103-BH1 and 7103-BH2) when firing coal. The baghouses shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition I.7 of 3/9/95 Permit Amendment)

9. Particulate emissions from the boilers (Ref. 7103-1-01 and 7103-1-03) shall each be controlled by a cyclone (Ref. 7103-CY1 and 7103-CY2) when firing coal. The cyclones shall be provided with adequate access for inspection.
(9 VAC 5-80-110)

10. The approved fuels for the boilers are specified in Condition III.A.1. A change in these fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition I.8 of 3/9/95 Permit Amendment)

11. The coal to be burned in the boilers (Ref. 7103-1-01, 7103-1-2R 7103-1-03 and 7103-1-05) shall meet the specifications below:

    COAL:
    Average sulfur content per shipment: 1.12%
    Average ash content per shipment: 6.8%

    (9 VAC 5-80-110 and Condition I.12 of 8/5/94 Permit)

12. The residual oil to be burned in Boiler 4 (Ref. 7103-1-04) shall meet the specifications below:

    RESIDUAL OIL which meets the ASTM specifications for numbers 4, 5, or 6 fuel oil:
    Average sulfur content per shipment: 2.0%

    (9 VAC 5-80-110 and Condition I.13 of 8/5/94 Permit)

13. The University of Virginia shall not operate more than three (3) of its coal/natural gas fired boilers (Ref. 7103-1-01, 7103-1-2R 7103-1-03 and 7103-1-05) at any one time.
(9 VAC 5-80-110 and Condition I.21 of 8/5/94 Permit)

14. Visible emissions from boilers 1, 3 and 4 (Ref. 7103-1-01, 7103-1-03 and 7103-1-04) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty percent (60%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110 and 9 VAC 5-40-940)

15. Visible emissions from Boiler 2R (Ref. 7103-1-2R) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110 and 9 VAC 5-50-80)

16. Visible emissions from Boiler 5 (Ref. 7103-1-5) shall not exceed twenty percent (20%), except during one six-minute period in any one hour in which visible emissions shall not exceed twenty-seven (27%) percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110, 9 VAC 5-50-80 and 40 CFR 60.43b)

17. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.
(9 VAC 5-80-110 and Condition II.8 of 8/5/94 Permit)

18. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided, including the names of trainees, the date of training and the nature of the training.

    Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9 VAC 5-80-110 and Conditions II.8 and II.9 of 8/5/94 Permit)

19. Except where this permit is more restrictive than the applicable requirement, Boiler 5 (Ref. 7103-1-05) shall be operated in compliance with the requirements of 40 CFR 60, Subpart Db and 40 CFR 60, Subpart A.
(9 VAC 5-80-110, 40 CFR 60.1 – 60.19, 40 CFR 60.40b – 60.49b and Condition I.18 of 8/5/94 Permit)

B. Monitoring and Recordkeeping

1. Each baghouse (Ref. 7103-BH1 and 7103-BH2) shall be equipped with a device to continuously measure the differential pressure drop across the baghouse. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer’s written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when

the baghouse is operating.
(9 VAC 5-80-110 and Condition I.10 of 8/5/94 Permit)

2. The permittee shall conduct a weekly inspection of each baghouse (Ref. 7103-BH1 and 7103-BH2). The inspection shall include an observation of the pressure drop across the baghouse. If during the inspection, the pressure drop is not within the manufacturer's recommended range, timely corrective action shall be taken such that the baghouse resumes proper operation.
(9 VAC 5-80-110)

3. An annual internal inspection shall be conducted on each cyclone (Ref. 7103-CY1 and 7103-CY2) by the permittee to ensure structural integrity. The permittee shall record:

   a. The date, time and name of the person performing each inspection;

   b. The results of each inspection; and

   c. The maintenance performed, if required, including the date, time and name of the person(s) performing the maintenance.

   (9 VAC 5-80-110)

4. A continuous opacity monitor (COMS) shall be installed to measure and record opacity from the Main Heating Plant stack (Stack Ref. 7103-1). The opacity monitor shall monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from the Main Heating Plant stack (Stack Ref. 7103-1). The monitors shall be maintained, located, and calibrated in accordance with approved procedures (40 CFR 60.13).
(9 VAC 5-80-110, 9 VAC 5-50-40 F, 40 CFR 60.13, 40 CFR 60.48b and Conditions I.16 and I.17 of 8/5/94 Permit)

5. Continuous emission monitors (CEMS) shall be installed to measure and record the concentration of NO_X from boilers 2R and 5 (Ref. 7103-1-2R and 7103-1-05) . The NO_X monitors shall be located between each boiler outlet (Ref. 7103-1-2R and 7103-1-05) and the Main Heating Plant stack (Stack Ref. 7103-1). Each NO_X monitor shall be colocated with a CO_2 or O_2 monitor. The monitors shall be maintained, located, and calibrated in accordance with approved procedures (40 CFR 60.13).
(9 VAC 5-80-110, 9 VAC 5-50-40 F, 40 CFR 60.13, 40 CFR 60.48b and Conditions I.16 and I.17 of 8/5/94 Permit)

6. The span value of each CEMS/COMS shall be set at the following:

Monitor	Fuel Type	Span
CEMS (NO_x)	Coal	1000 ppm
	Natural Gas	500 ppm
	Mixtures[1,2]	500(x) + 1000(y)

Monitor	Fuel Type	Span
COMS (Opacity)	-	60%-80%

(1) x is the fraction of total heat input derived from natural gas; y is the fraction of total heat input derived from coal.
(2) All span values computed for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm.
(9 VAC 5-80-110 and 40 CFR 60.48b)

7. The continuous monitoring data generated by the NO_X monitor on (Ref. 7103-1-2R and 7103-1-05) shall be used to determine compliance with the NO_X emissions standards in Conditions III.A.3, III.A.6 and III.A.7. Compliance with the NO_X emissions standards shall be determined on both a 30-day and an annual rolling average basis. The permittee shall install and maintain instrumentation necessary to determine compliance during on-site inspection by agency personnel. These data shall be kept on file for the most current five-year period and made available to the Department upon request.
(9 VAC 5-80-110, 9 VAC 5-50-40 and Condition I.19 of 8/5/94 Permit)

8. A CEMS/COMS quality control program which meets the requirements of 40 CFR Part 60 (Section 60.13, Appendix B and Appendix F) shall be implemented for all continuous monitoring systems.
(9 VAC 5-80-110, 9 VAC 5-50-40 and 40 CFR 60.13)

9. The permittee shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts of the COMS at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B of 40 CFR 60. The system must allow the amount of excess zero and span drift measured at the 24-hour checks to be recorded and quantified, whenever specified. The optical surfaces exposed to effluent gases shall be cleaned prior to performing the zero and span drift adjustments except for that systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
(9 VAC 5-80-110 and 40 CFR 60.13(d)(1))

10. The permittee shall develop procedures including a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures shall provide a system check of the analyzer's internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.
(9 VAC 5-80-110 and 40 CFR 60.13(d)(2))

11. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required, the COMS shall be in continuous operation and shall complete

a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
(9 VAC 5-80-110 and 40 CFR 60.13(e)(1))

12. When NO_X emissions data are not obtained from the CEMS as a result of system breakdowns, repairs, calibration checks, and zero and span adjustments required, emissions data will be obtained by using standby monitoring systems, Method 7, Method 7A (reference 40 CFR 60, Appendix A), or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.
(9 VAC 5-80-110 and 40 CFR 60.48b)

13. UVA shall keep a notice posted in the Main Heating Plant control room providing instructions to operators to contact the Director, Valley Region, via facsimile whenever opacity exceeds 20% or more for more than one hour even if occurring during startup, shutdown, or malfunction. Furthermore, the notice shall provide that the Director, Valley Region, shall be contacted any time opacity exceeds 60% for a six-minute average when any combination of boilers 1, 3 and 4 (Ref. 7103-1-01, 7103-1-03 and 7103-1-04) are operating by themselves, or any time opacity exceeds 27% when Boiler 5 (Ref. 7103-05) is operating by itself or in conjunction with any other boiler, or any time opacity exceeds 30% when Boiler 2R (Ref. 7103-2R) is operating by itself or in conjunction with any combination of boilers 1, 3 and 4. Startup and shutdown exemptions are only allowable during periods that boilers 2R and 5 are operating without boilers 1, 3 and 4. To facilitate the reporting requirements, UVA will track the specific boilers operating at any point in time and indicated this information in any required reports indicating status of emissions. Shift operators shall check the CEMS and the logbook at the beginning of each shift to ensure that proper notifications have been made to DEQ, if necessary. UVA shall train all boiler operators to follow this procedure.
(9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-40-940 and 40 CFR 60.43b)

14. The permittee shall obtain a certification from the fuel supplier with each shipment of coal and residual oil to be burned in the boilers (Ref. 7103-1-01, Ref. 7103-1-2R, 7103-1-03, 7103-1-04 and Ref. 7103-1-05). Each fuel supplier certification shall include the following:

    a. Coal

        (1) The name of the fuel supplier;

        (2) The date on which the coal was shipped;

        (3) The weight of coal delivered in the shipment;

        (4) The sulfur and ash content of the coal;

        (5) The method used to determine the sulfur and ash content of the coal; and

(6) The as received higher heating value of the coal.

b. Residual Oil

(1) The name of the fuel supplier;

(2) The date on which the residual oil was received;

(3) The volume of residual oil delivered in the shipment;

(4) A statement that the residual oil complies with the American Society for Testing and Materials specifications for numbers 4, 5, or 6 fuel oil;

(5) The sulfur content of the residual oil;

(6) The method used to determine the sulfur content of the residual oil; and

(7) The higher heating value of the residual oil.

(9 VAC 5-80-110 and Conditions I.12, I.13, I.20 and II.7 of the 8/5/94 Permit)

15. The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

a. The monthly and annual throughput of coal (tons), natural gas (million cubic feet), residual oil (gallons) and fuel heat input (MMBtu/hr) as applicable for each boiler (Ref. 7103-1-01, 7103-1-2R, 7103-1-03, 7103-1-04 and 7103-1-05). The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.

b. Annual particulate matter, PM-10, sulfur dioxide, nitrogen oxides (as NO_2), VOC and carbon monoxide emission calculations (in tons) for each boiler (Ref. 7103-1-01, Ref. 7103-1-2R, 7103-1-03, 7103-1-04 and Ref. 7103-1-05), calculated monthly as the sum of each consecutive 12-month period, using calculation methods approved by the Director, Valley Region.

c. All fuel supplier certifications, including the sulfur content of the coal and residual oil, the ash content of the coal and the test methods used to determine both sulfur and ash content of the fuels.

d. A log of annual inspections for the cyclones.

e. A log of weekly baghouse inspection results including:

(1) The date, time, and name of person performing each inspection;

(2) The pressure drop across the baghouse; and

(3) Any maintenance or repairs performed as a result of these inspections.

f. Records of the required boiler operator training including a statement of time, place and nature of training provided.

g. Manufacturer's recommendations for control device operation.

h. COMS calibrations and calibration checks, percent operating time, and excess emissions.

i. Results of all stack tests.

j. Daily records for Boilers 2R and 5 (Ref. 7103-1-2R and 7103-1-05) that include the following:

(1) Calendar date.

(2) The monthly and annual capacity factor for each fuel burned in each boiler calculated on a 12-month rolling average basis. The annual capacity factor is determined by dividing the actual heat input to the steam generating unit during the calendar year from the combustion of coal by the potential heat input to the steam generating unit if the steam generating unit had been operated for 8,760 hours at the maximum design heat input capacity.

(3) The average hourly nitrogen oxides emission rates (expressed as NO_2) (pounds per million BTU heat input) measured or predicted.

(4) The 30-day average nitrogen oxides emission rates (pounds per million BTU heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days. These data shall be used to demonstrate compliance with the individual and mixed fuel limitations established in Conditions III.A.3, III.A.6 and III.A.7.

(5) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards in Conditions III.A.3, III.A.6 and III.A.7, with the reasons for such excess emissions as well as a description of corrective actions taken.

(6) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

(7) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.

(10) Results of daily NO_X CEMS drift tests and quarterly accuracy assessments as required under 40 CFR 60, Appendix F, Procedure 1.

k. The DEQ-approved, pollutant-specific emission factors and the equations used to demonstrate compliance with Conditions III.A.2, III.A.3, III.A.4, III.A.5 and III.A.6.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110, 40 CFR 60.49b, and Conditions I.12, I.13, I.20, II.7 and II.8 of the 8/5/94 Permit)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time using appropriate methods. Test ports shall be provided for boilers 2R and 5 (Ref. 7103-1-02R and 7103-1-05) between each boiler outlet and the Main Heating Plant stack (Stack Ref. 7103-1). Test ports shall be provided at other appropriate locations upon request from the Department.
(9 VAC 5-80-110, 9 VAC 5-40-30, 9 VAC 5-50-30 and Conditions I.14 and II.5 of the 8/5/94 Permit)

2. The permittee shall conduct performance tests for particulate matter (PM) emissions in accordance with EPA Method 5 or 17 (40 CFR Part 60, Appendix A) and sulfur dioxide emissions in accordance with EPA Method 6 (40 CFR Part 60, Appendix A) for boilers 2R, 3 and 5 (Ref. 7103-1-2R, 7103-1-3 and 7103-1-05) to demonstrate compliance with the hourly emission limits contained in Conditions III.A.3, III.A.4 and III.A.6. The tests shall be performed within 180 days of issuance of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Director, Valley Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Region, within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and 9 VAC 5-50-30)

3. The permittee shall maintain records (supplier fuel analysis) of all coal shipments purchased. The sulfur content shall be determined according to ASTM D4239-97 "Standard Test Method for Sulfur in the Analytical Sample of Coal and Coke Using High-Temperature Tube Furnace Combustion Methods" or a Department of Environmental Quality approved equivalent method. The ash content shall be determined according to ASTM D3174-97 "Standard Test Method for Ash in the Analytical Sample of Coal and Coke from Coal" or a Department of Environmental Quality approved equivalent method.

   (9 VAC 5-80-110)

4. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO_x	EPA Method 7 or 7e
SO_2	EPA Method 6, 6a or 6c
Coal Sulfur Content	Method 19
CO	EPA Method 10
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

D. Reporting

1. The permittee shall furnish notification to the Director, Valley Region of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

   a. Identification of the specific boiler to be taken out of service, as well as its location, and registration number;

   b. The expected length of time that the air pollution control equipment will be out of service;

   c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;

   d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

   (9 VAC 5-80-110, 9 VAC 5-20-180 and Condition II.13 of the 8/5/94 Permit)

2. The permittee shall furnish notification to the Director, Valley Region, of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. Such notification shall be made as soon as practicable but not later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the discovery. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Valley Region, in writing.

   (9 VAC 5-80-110, 9 VAC 5-20-180 and Condition II.13 of the 8/5/94 Permit)

3. The permittee shall submit quarterly excess emission reports for any excess emissions which occurred for Boiler 5 (Ref. 7103-1-05) during the reporting period. Reports shall follow the format provided in 40 CFR 60.49b(g) and shall be submitted to the Director, Valley Regional Office, and one copy shall be submitted to:

   Associate Director
   Air Enforcement Branch (3AP10)
   U. S. Environmental Protection Agency
   Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

   (9 VAC 5-80-110 and 40 CFR 60.49(b))

IV. Coal Handling System

A. Limitations

1. The annual throughput of coal at the facility (Ref. 7103-CH1) shall not exceed 27,700 tons, calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-110 and Condition I.4 of 2/14/86 Permit)

2. The annual throughput of coal at the truck station (Ref. 7103-CH1) shall not exceed 1,500 tons, calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-110 and Condition I.5 of 2/14/86 Permit)

3. Emissions from the operation of the four coal storage silos (Ref. 7103-CH1) shall not exceed the limitations specified below:

Particulate Matter	0.08 lbs/hr	0.04 tons/yr

(9 VAC 5-80-110 and Condition I.6 of 2/14/86 Permit)

4. Emissions from the coal loading to trucks (Ref. 7103-CH1) shall not exceed the limitations specified below:

Particulate Matter	1.0 lbs/hr	0.03 tons/yr

(9 VAC 5-80-110 and Condition I.7 of 2/14/86 Permit)

5. Emissions from the operation of the coal unloading building (Ref. 7103-CH1) shall not exceed the limitations specified below:

Particulate Matter	0.4 lbs/hr	0.17 tons/yr

(9 VAC 5-80-110 and Condition I.8 of 2/14/86 Permit)

6. Emissions from coal unloading by truck (Ref. 7103-CH1) shall not exceed the limitations specified below:

Particulate Matter	0.2 lbs/hr	0.08 tons/yr

(9 VAC 5-80-110 and Condition I.9 of 2/14/86 Permit)

7. Particulate emissions from each of the four coal silos (Ref. 7103-CH1) and four bunkers (Ref. 7103-CH1-B1 through B4) will be controlled by filter cartridges (Ref. 7103-BH3). Each filter cartridge shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and Condition I.10 of 2/14/86 Permit)

8. Particulate emissions from the unloading of coal silos to trucks will be controlled by the use of flexible chute extensions to load trucks. The truck station (Ref. 7103-CH1) shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and Condition I.11 of 2/14/86 Permit)

9. Particulate emissions from coal unloading of railcars (Ref. 7103-CH1) will be controlled by enclosing the area with an open-end metal building.
   (9 VAC 5-80-110 and Condition I.12 of 2/14/86 Permit)

10. All coal bunkers (Ref. 7103-CH1) and the coal conveying system (Ref. 7103-CH1) shall be completely enclosed.
    (9 VAC 5-80-110 and Conditions I.14 and I.15 of 2/14/86 Permit)

11. Visible emissions from the truck station (Ref. 7103-CH1) shall not exceed ten percent (10%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
    (9 VAC 5-80-110 and Condition I.16 of 2/14/86 Permit)

12. Visible emissions from each baghouse (Ref. 7103-CH1) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
    (9 VAC 5-80-110 and 9 VAC 5-50-80)

13. Visible fugitive emissions from the coal handling equipment operations shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity.
    (9 VAC 5-80-110 and 9 VAC 5-40-80)

14. Fugitive dust emission controls for the coal handling equipment operations shall include the following, or equivalent, as a minimum:

    a. Dust from material handling, screens, load-outs and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ).

    b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.

c. Dust from haul roads and traffic areas shall be controlled by application of asphalt, water, suitable chemicals or equivalent methods approved by the DEQ.

d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110 and 9 VAC 5-40-90)

15. The coal unloading by truck shall be discontinued except during emergencies. Emergency truck unloading will only take place when the normal rail unloading is not operational.
(9 VAC 5-80-110 and Condition I.17 of 2/14/86 Permit)

16. Coal shall be washed, double-screened and treated using oil or a DEQ-approved equivalent method.
(9 VAC 5-80-110 and Condition I.19 of 2/14/86 Permit)

17. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

b. Maintain an inventory of spare parts.

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided, including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-80-110 and Conditions II.6 and II.7 of the 2/14/86 Permit)

B. Monitoring and Recordkeeping

1. Each cartridge filter (Ref. 7103-BH3) shall be equipped with a device to continuously measure the differential pressure drop across the cartridge filter. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer’s written

requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the cartridge filter is operating.
(9 VAC 5-80-110)

2. The permittee shall conduct a weekly inspection of each cartridge filter (Ref. 7103-BH3). The inspection shall include an observation of the pressure drop across the cartridge filter. If during the inspection, the pressure drop is not within the manufacturer's recommended range, timely corrective action shall be taken such that the cartridge filter resumes proper operation.
(9 VAC 5-80-110)

3. The permittee shall conduct a weekly visible emissions inspection of each cartridge filter exhaust (Ref. 7103-BH3) and the truck station exhaust (Ref. 7103-CH1). All visible emissions inspections must be performed when the equipment is operating at the maximum rate of operation for the day. Each observation period shall be a minimum of one minute. If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is taken within two hours of the visible emission inspection such that the equipment operates with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of sixty 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter.
(9 VAC 5-80-110)

4. The permittee shall perform the following inspection and maintenance activities for coal handling equipment operations:

   a. The permittee shall inspect and maintain weekly the fugitive dust emissions control system used to control fugitive emissions from coal handling activities;

   b. The permittee shall perform a weekly visual survey of the coal handling activities for any sources of excessive fugitive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions that leave the plant site boundaries. The person conducting this survey does not have to be Method 9 certified. However, the individual should be familiar with the procedures of Method 9 including using the proper location to observe visible emissions. If sources of excess fugitive emissions are identified during the survey, the permittee shall use water or a suitable chemical treatment to minimize the fugitive emissions. If water is used to control the fugitive dust emissions, the permittee shall take care not to create a water quality problem from surface water run-off.

   (9 VAC 5-80-110)

5. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

   a. Annual throughput of coal (tons) at the facility (Ref. 7103-CH1), calculated monthly as the sum of each consecutive 12-month period.

   b. Annual throughput of coal (tons) at the truck station (Ref. 7103-CH1), calculated monthly as the sum of each consecutive 12-month period.

   c. A monthly log of coal (tons) received by rail or truck, and a monthly log of coal (tons) loaded onto trucks for transport.

   d. A log of weekly baghouse inspections results including:

      (1) The date, time, and name of person performing each inspection;

      (2) The pressure drop across the baghouse; and

      (3) Any maintenance or repairs performed as a result of these inspections including the date, time and person performing the repairs.

   e. A log of weekly visible emissions inspections for the baghouse exhausts, truck exhaust, and coal handling operations, including:

      (1) The date, time, and name of person performing each inspection;

      (2) Whether or not there were visible emissions; and

      (3) Any maintenance or repairs performed as a result of these inspections including the date, time and person performing the repairs.

   f. Records of the required training and certification for operators of the air pollution control equipment. Certification of training shall consist of a statement of time, place, and nature of training provided.

   g. Results of all visible emissions evaluations.

   h. The pollutant-specific emission factors and equations used to demonstrate compliance with Condition IV.A.3. IV.A.4, IV.A.5 and IV.A.6.

   These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
   (9 VAC 5-80-110 and Conditions I.18, II.5, II.6 and II.7 of the 2/14/86 Permit)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time using appropriate methods. Test ports shall be provided at the appropriate locations upon request of the Department.
(9 VAC 5-80-110 and Condition II.4 of 2/14/86 Permit)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Methods 5, 17
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

D. Reporting

1. The permittee shall furnish notification to the Director, Valley Region of the intention to unload coal by truck at least 24 hours prior to the unloading event.
(9 VAC 5-80-110 and Condition I.17 of 2/14/86 Permit)

2. The permittee shall furnish notification to the Director, Valley Region of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

   a. Identification of the specific process to be taken out of service, as well as its location, and registration number;

   b. The expected length of time that the air pollution control equipment will be out of service;

   c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;

   d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

   (9 VAC 5-80-110, 9 VAC 5-20-180 and Condition II.11 of 2/14/86 Permit)

3. The permittee shall furnish notification to the Director, Valley Region, of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. Such notification shall be made as soon as practicable but not later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the discovery. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Valley Region, in writing.

   (9 VAC 5-80-110, 9 VAC 5-20-180 and Condition II.11 of 2/14/86 Permit)

V. Other Fuel Burning Equipment

A. Limitations

1. The 10.73 MMBtu/hr boiler (Ref. 5577-1-01) shall consume no more than 10,460 standard cubic feet per hour and no more than 30 million standard cubic feet per year of natural gas. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110 and Condition 4 of 3/29/90 Permit as Amended 11/14/90)

2. The 10.73 MMBtu/hr boiler (Ref. 5577-1-01) shall consume no more than 74.5 gallons per hour and 21,600 gallons per year of distillate oil. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110 and Condition 5 of 3/29/90 Permit as Amended 11/14/90)

3. Emissions from the operation of the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) when firing natural gas shall not exceed the limits specified below:

Particulate Matter	6.3 lbs/hr	
Sulfur Dioxide	28.2 lbs/hr	
Nitrogen Oxides	1.5 lbs/hr	2.1 tons/yr
Carbon Monoxide	0.4 lbs/hr	0.5 tons/yr

(9 VAC 5-80-110, 9 VAC 5-40-900, 9 VAC 5-40-910, 9 VAC 5-40-930 and Condition 6 of 3/29/90 Permit as Amended 11/14/90)

4. Emissions from the operation of the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) when firing distillate oil shall not exceed the limits specified below:

Particulate Matter	6.3 lbs/hr	
Sulfur Dioxide	5.5 lbs/hr	0.8 tons/yr
Nitrogen Oxides	1.5 lbs/hr	0.3 tons/yr
Carbon Monoxide	0.4 lbs/hr	0.1 tons/yr

(9 VAC 5-80-110, 9 VAC 5-40-900, 9 VAC 5-40-910 and Condition 7 of 3/29/90 Permit as Amended 11/14/90)

5. Emissions from the following fuel burning equipment shall not exceed the limits specified below:

Emission Unit	PM	SO_2
Superior Model #G4RB40A (Ref. 0207-1-01)	0.02 lbs/hr	3.70 lbs/hr
Superior Model #G4RB40A (Ref. 0207-1-02)	0.02 lbs/hr	3.70 lbs/hr
Columbia Model #WL140 (Ref. 0580-1-01)	1.25 lbs/hr	3.17 lbs/hr
Cleaver Brooks Model # CB 200-40 (Ref. 0580-2-01)	0.02 lbs/hr	4.49 lbs/hr
Weil-McLain Model # 788 (Ref. 0603-1-01)	1.55 lbs/hr	4.22 lbs/hr
NRC Model #9-47 (Ref. 1600-1-01)	1.17 lbs/hr	2.90 lbs/hr
Cleaver Brooks Model #CB 428-3 (Ref. 5576-1-01)	0.18 lbs/hr	33.26 lbs/hr
Cleaver Brooks Model #CB 428-3 (Ref. 5576-1-02)	0.18 lbs/hr	33.26 lbs/hr
FLO-KNTRL #1 (Ref. 7533-1-01)	0.22 lbs/hr	39.60 lbs/hr
FLO-KNTRL #2 (Ref. 7533-1-02)	0.22 lbs/hr	39.60 lbs/hr

(9 VAC 5-80-110, 9 VAC 5-40-900, 9 VAC 5-40-910 and 9 VAC 5-40-930)

6. Visible emissions from the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) shall not exceed ten percent (10%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-50-80 and Condition 8 of 3/29/90 Permit as Amended 11/14/90)

7. Visible emissions from the following emission units shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A):

Columbia Model #WL140 (Ref. 0580-1-01)
Weil-McLain Model # 788 (Ref. 0603-1-01)
NRC Model #9-47 (Ref. 1600-1-01)
FLO-KNTRL #1 (Ref. 7533-1-01)
FLO-KNTRL #2 (Ref. 7533-1-02)

This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110 and 9 VAC 5-50-80)

8. Visible emissions from the following emission units shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty percent (60%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A):

   Superior Model #G4RB40A (Ref. 0207-1-01)
   Superior Model #G4RB40A (Ref. 0207-1-02)
   Cleaver Brooks Model # CB 200-40 (Ref. 0580-2-01)
   Cleaver Brooks Model #CB 428-3 (Ref. 5576-1-01)
   Cleaver Brooks Model #CB 428-3 (Ref. 5576-1-02)

   (9 VAC 5-80-110 and 9 VAC 5-40-940)

9. The approved fuels for the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) are natural gas and distillate oil. A change in fuels may require a permit to modify and operate. (9 VAC 5-80-110 and Condition 10 of 3/29/90 Permit as Amended 11/14/90)

10. The approved fuel for the following fuel burning equipment is distillate oil:

    NRC Model #9-47 (Ref. 1600-1-01)

    A change in fuels may require a permit to modify and operate.
    (9 VAC 5-80-110)

11. The approved fuels for the following fuel burning equipment are natural gas and distillate oil:

    Superior Model #G4RB40A (Ref. 0207-1-01)
    Superior Model #G4RB40A (Ref. 0207-1-02)
    Columbia Model #WL140 (Ref. 0580-1-01)
    Cleaver Brooks Model # CB 200-40 (Ref. 0580-2-01)
    Weil-McLain Model # 788 (Ref. 0603-1-01)
    Cleaver Brooks Model #CB 428-3 (Ref. 5576-1-01)
    Cleaver Brooks Model #CB 428-3 (Ref. 5576-1-02)
    FLO-KNTRL #1 (Ref. 7533-1-01)
    FLO-KNTRL #2 (Ref. 7533-1-02)

    A change in fuels may require a permit to modify and operate.
    (9 VAC 5-80-110 and Condition 10 of 3/29/90 Permit as Amended 11/14/90)

12. The distillate oil to be burned in the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D-396-78 specifications for numbers 1 or 2 fuel oil:
Maximum sulfur content per shipment: 0.5%
Annual weighted average sulfur content: 0.2%

(9 VAC 5-80-110 and Condition 11 of 3/29/90 Permit as Amended 11/14/90)

13. The distillate oil to be burned in the fuel burning equipment listed in Condition V.A.5 shall meet the specifications below:

    DISTILLATE OIL which meets the ASTM specifications for numbers 1 or 2 fuel oil:
    Maximum sulfur content per shipment: 0.5%

    (9 VAC 5-80-110)

14. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.
    (9 VAC 5-80-110)

15. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided, including the names of trainees, the date of training and the nature of the training.

    Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9 VAC 5-80-110)

B. Monitoring and Recordkeeping

1. The permittee shall conduct visible emission inspections on each boiler stack listed in Conditions V.A.6 through V.A.8 in accordance with the following procedures and frequencies:

   a. At a minimum of once per month, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, EPA Method 9. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 20%, the VEE shall be conducted for a total of 60 minutes.

   b. All visible emissions inspections for each boiler shall be performed when the boiler is operating.

   c. If visible emissions inspections conducted during 12 consecutive months show no visible emissions for a particular boiler stack, the permittee may reduce the monitoring frequency to once per quarter for that boiler stack. Anytime the quarterly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per month for that stack.

   All observations and VEE results shall be recorded.
   (9 VAC 5-80-110)

2. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil to be burned in each boiler. Each fuel supplier certification shall include the following:

   a. The name of the fuel supplier;

   b. The date on which the distillate oil was received;

   c. The volume of distillate oil delivered in the shipment;

   d. A statement that the distillate oil complies with the ASTM specifications for numbers 1 or 2 fuel oil for boilers listed in Condition V.A.5;

   e. A statement that the distillate oil complies with the ASTM D396-78 specifications for numbers 1 or 2 fuel oil for the 10.73 MMBtu/hr boiler (Ref. 5577-1-01);

   f. The sulfur content of the distillate oil;

   g. The method used to determine the sulfur content of the distillate oil;

h. The higher heating value of the distillate oil.

(9 VAC 5-80-110, 40 CFR 60 Subpart Dc and Conditions 11 and 12 of 3/29/90 Permit as Amended 11/14/90)

3. The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

   a. The daily, monthly and annual throughput of distillate oil (gallons) and natural gas (million cubic feet) for the 10.73 MMBtu/hr boiler (Ref. 5577-1-01). Annual throughputs shall be calculated monthly as the sum of each consecutive 12-month period;

   b. Annual emissions calculations (in tons) as necessary to demonstrate compliance with the limitations established in Conditions V.A.3 and V.A.4. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period using calculation methods approved by the Director, Valley Region.

   c. All fuel supplier certifications, including the sulfur content of the distillate oil and the test methods used to determine the sulfur content of the oil.

   d. The DEQ-approved, pollutant-specific emission factors and the equations used to demonstrate compliance with Conditions III.A.3, III.A.4 and III.A.5.

   These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
   (9 VAC 5-80-110, 40 CFR 60 Subpart Dc and Conditions 11 and 12 of 3/29/90 Permit as Amended 11/14/90)

4. The permittee shall maintain records of the required training for boiler operators including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
   (9 VAC 5-80-110)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-80-110, 9 VAC 5-50-30 and Condition 9 of 3/29/90 Permit as Amended 11/14/90)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
NO_x	EPA Method 7 or 7e
SO_2	EPA Method 6, 6a or 6c
CO	EPA Method 10
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

VI. Electrical Generators

A. Limitations

1. The 1250-kilowatt generator (Ref. 7103-2-01) shall consume no more than 53,261 gallons per year of distillate oil. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110 and Condition 6 of 11/17/03 Permit)

2. Emissions from the operation of the 1250-kilowatt generator (Ref. 7103-2-01) shall not exceed the limits specified below:

Sulfur Dioxide	7.01 lbs/hr	1.75 tons/yr
Nitrogen Oxides	44.42 lbs/hr	11.10 tons/yr
Carbon Monoxide	11.80 lbs/hr	2.95 tons/yr

(9 VAC 5-80-110 and Condition 10 of 11/17/03 Permit)

3. Visible emissions from the following emergency generators shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A):

500ROZD4/Gen 5M4027 (Ref. 0068-1-01)
G.E. (G) 1500 DFMB (Ref.1142-1-01)
G.E. 8DA (Ref. 1142-2-01)
Caterpillar 3512TA (Ref. 1148-1-01)
Caterpillar 3512TA (Ref. 1148-2-01)
Caterpillar 3512TA (Ref. 1148-3-01)
Caterpillar A6511-20-24V-A (Ref. 1148-4-01)
DFLE-4492628 (Ref. 1155-1-01)
500 DFFB (Ref. 1196-1-01)
WA-9675-0202 (Ref. 3761-1-01)
Caterpillar Model #SR-4 (Ref. 7103-2-01)
1500ROZD4 (Ref. 7185-1-01)

This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110, 9 VAC 5-50-80 and Condition 11 of the 11/17/03 Permit)

4. The approved fuel for the emergency generators is distillate oil. A change in fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 4 of 11/17/03 Permit)

5. The distillate oil to be burned in the emergency generators shall meet the specifications below:

   DISTILLATE OIL which meets the ASTM specifications for numbers 1 or 2 fuel oil:
   Maximum sulfur content per shipment: 0.5%

   (9 VAC 5-80-110 and Condition 7 of the 11/17/03 Permit)

6. Emergency generator emissions shall be controlled by proper operation and maintenance. Generator operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.
   (9 VAC 5-80-110 and Condition 9 of the 11/17/03 Permit)

7. Each generator is to be used only for providing power at the location during interruption of service from the normal power supplier, periodic maintenance testing, and operational training. Total usage for each emergency generator may not exceed 500 hours per year.
   (9 VAC 5-80-110 and Condition 5 of the 11/17/03 Permit)

B. Monitoring and Recordkeeping

1. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil to be burned in each generator. Each fuel supplier certification shall include the following:

   a. The name of the fuel supplier;

   b. The date on which the distillate oil was received;

   c. The volume of distillate oil delivered in the shipment;

   d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications for numbers 1 or 2 fuel oil;

   e. The sulfur content of the distillate oil;

   f. The method used to determine the sulfur content of the distillate oil;

   g. The higher heating value of the distillate oil.

   (9 VAC 5-80-110 and Condition 8 of 11/17/03 Permit)

2. The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

   a. The monthly and annual throughput of distillate oil (gallons) for the 1250-kilowatt generator (Ref. 7103-2-01). Annual throughputs shall be calculated monthly as the sum of each consecutive 12-month period;

   b. The monthly and annual hours of operation for each generator. Annual hours of operation shall be calculated monthly as the sum of each consecutive 12-month period;

   c. Annual emissions calculations (in tons) as necessary to demonstrate compliance with the limitations established in Conditions VI.A.2. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period using calculation methods approved by the Director, Valley Region.

   d. All fuel supplier certifications, including the sulfur content of the distillate oil and the test methods used to determine the sulfur content of the oil.

   e. Records of the required generator operator training including a statement of time, place and nature of training provided.

   f. The DEQ-approved, pollutant-specific emission factors and the equations used to demonstrate compliance with Condition VI.A.2.

   These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
   (9 VAC 5-80-110, and Conditions 9 and 12 of 11/17/03 Permit)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-80-110, 9 VAC 5-50-30 and Condition 3 of 11/17/03 Permit)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
NO_x	EPA Method 7 or 7e
SO_2	EPA Method 6, 6a or 6c

Pollutant	Test Method (40 CFR Part 60, Appendix A)
CO	EPA Method 10
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

D. Reporting

1. The permittee shall furnish notification to the Director, Valley Region, of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. Such notification shall be made as soon as practicable but not later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the discovery. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Valley Region, in writing. (9 VAC 5-80-110 and Condition 14 of the 11/17/03 Permit)

VII. Woodworking Equipment

A. Limitations

1. Particulate matter emissions from the Cabinet Shop (Ref. 0245-1-01) shall be controlled by a fabric filter (Ref. 0245-BH1). The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-110)

2. Visible emissions from the Cabinet Shop (Ref. 0245-1-01) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-40-2280 and 9 VAC 5-50-80)

3. Particulate matter emissions from the woodworking equipment exhaust (Ref. 0245-1-01) shall not exceed 0.05 grains per standard cubic feet of exhaust gas.
(9 VAC 5-80-110 and 9 VAC 5-50-2270)

4. The monthly use of wood furniture coatings and adhesives shall not exceed 100 gallons.
(9 VAC 5-80-110)

B. Monitoring and Recordkeeping

1. The fabric filter (Ref. 0245-BH1) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-110)

2. The permittee shall perform weekly inspections of the fabric filter (Ref. 0245-BH1). The inspections shall include an observation of the presence of visible emissions and the pressure drop across the fabric filter (Ref. 0245-BH1). The presence of visible emissions shall require further investigation as to the cause of the visible emissions and corrective action shall be taken.
(9 VAC 5-80-110)

3. The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

   a. A log of weekly fabric filter inspections results including:

(1) The date, time, and name of person performing each inspection;

(2) The pressure drop across the fabric filter; and

(3) Any maintenance or repairs performed as a result of these inspections including the date, time and person performing the repairs.

b. The monthly throughput (in gallons) of wood furniture coatings and adhesives.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110)

C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

VIII. Medical Equipment

A. Limitations

1. Visible emissions from the each ethylene oxidizer (Ref. 1150-1-04 and 1150-1-05) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
   (9 VAC 5-80-110 and 9 VAC 5-50-80)

2. Ethylene oxidizer (Ref. 1150-1-04 and 1150-1-05) emissions shall be controlled by proper operation and maintenance. Ethylene oxidizer operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.
   (9 VAC 5-80-110 and Condition 9 of the 11/17/03 Permit)

B. Monitoring and Recordkeeping

The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to, the records of the required ethylene oxidizer operator training including a statement of time, place and nature of training provided. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110 and Conditions 9 and 12 of the 11/17/03 Permit)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
   (9 VAC 5-80-110, 9 VAC 5-50-30 and Condition 3 of 11/17/03 Permit)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

IX. Hazardous Air Pollutant Conditions

Unless the permittee obtains federally enforceable limits on its facility-wide emissions of hazardous air pollutants (HAPs) to below major-source thresholds prior to the specified date, the following federal requirements, derived from 40 CFR Part 63, will apply. For each standard, "requirements" include all control, operational, work practice, monitoring, recordkeeping, reporting, and testing requirements, as applicable.

A. Limitations

Except where this permit is more restrictive, existing boilers and process heaters (not including space heaters) shall comply with 40 CFR Part 63 Subpart DDDDD (Industrial/Commercial/Institutional Boilers and Process Heater NESHAP) no later than three years after the date of final rule publication in the Federal Register. New industrial boilers and process heaters must comply with the final rule when they are brought on line. New units have up to six months after the rule is final, or six months after startup, whichever is later, to demonstrate compliance with 40 CFR Part 63 Subpart DDDDD. (9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart DDDDD)

B. Recordkeeping

Except where this permit is more restrictive, the permittee shall record and retain all information necessary to determine compliance with 40 CFR Part 63 Subpart DDDDD. (9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart DDDDD)

C. Reporting

All notifications required by 40 CFR 63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) and 40 CFR Part 63 Subpart DDDDD shall be provided by the dates specified, unless the permittee obtains federally enforceable limits on its facility-wide emissions of HAPs to below major-source thresholds prior to the notification dates specified. Notifications shall be submitted to the Director, Valley Region. A copy of each notification shall be provided to EPA Region III, to the attention of the Industrial/Commercial/Institutional Boilers and Process Heater NESHAP Coordinator, at the following address:

EPA Region III
Air Enforcement Branch
3AP12
1650 Arch Street
Philadelphia PA 19103

(9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart DDDDD)

X. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
0127-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		173000 BTU/hr
0161-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0208-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		264000 BTU/hr
0223-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		212000 BTU/hr
0227-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0227-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0227-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-08	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0227-ICU-09	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
0228-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1096000 BTU/hr
0231-ICU-01	Nat. gas & #2 fuel oil combustion unit	9 VAC 5-80-720 C		808000 BTU/hr
0235-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		180000 BTU/hr
0235-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		180000 BTU/hr
0243-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
0243-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
0243-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
0254-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1260000 BTU/hr
0254-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		1260000 BTU/hr
0255-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		200000 BTU/hr
0255-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		38500 BTU/hr
0255-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		1650000 BTU/hr
0255-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		30000 BTU/hr
0257-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-08	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0261-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		4184000 BTU/hr
0263-ICU-01	#2 Fuel oil & N.gas combustion unit	9 VAC 5-80-720 C		797000 BTU/hr
0317-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		93000 BTU/hr
0317-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		93000 BTU/hr
0317-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		74000 BTU/hr
0321-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1096000 BTU/hr
0325-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		80000 BTU/hr
0329-ICU-01	Liquid Propane combustion unit	9 VAC 5-80-720 C		62000 BTU/hr
0331-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		254000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
0334-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		967000 BTU/hr
0356-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		700000 BTU/hr
0373-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		700000 BTU/hr
0396-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1200000 BTU/hr
0396-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		1200000 BTU/hr
0436-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		88000 BTU/hr
0436-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		88000 BTU/hr
0436-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		152000 BTU/hr
0439-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
0439-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
0441-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		422400 BTU/hr
0481-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0481-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0550-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		2501000 BTU/hr
0550-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		2501000 BTU/hr
0550-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		2501000 BTU/hr
0550-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0550-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0550-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0550-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0556-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0556-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0556-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0558-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		60000 BTU/hr
0558-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		240000 BTU/hr
0558-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		240000 BTU/hr
0558-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		528000 BTU/hr
0558-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		375000 BTU/hr
0558-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		375000 BTU/hr
0558-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		260000 BTU/hr
0558-ICU-08	Natural gas combustion unit	9 VAC 5-80-720 C		260000 BTU/hr
0558-ICU-09	Natural gas combustion unit	9 VAC 5-80-720 C		260000 BTU/hr
0580-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		561600 BTU/hr
0583-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		120000 BTU/hr
0583-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		200000 BTU/hr
0583-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
0583-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-08	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-09	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-10	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-11	Natural gas combustion unit	9 VAC 5-80-720 C		90000 BTU/hr
0583-ICU-12	Natural gas combustion unit	9 VAC 5-80-720 C		90000 BTU/hr
0583-ICU-13	Natural gas combustion unit	9 VAC 5-80-720 C		40000 BTU/hr
0583-ICU-14	Natural gas combustion unit	9 VAC 5-80-720 C		39500 BTU/hr
0583-ICU-15	Natural gas combustion unit	9 VAC 5-80-720 C		250000 BTU/hr
0583-ICU-16	Natural gas combustion unit	9 VAC 5-80-720 C		250000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
0583-ICU-17	Natural gas combustion unit	9 VAC 5-80-720 C		250000 BTU/hr
0594-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		220000 BTU/hr
0595-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		6277000 BTU/hr
0596-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		835000 BTU/hr
0603-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		857000 BTU/hr
0627-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		173900 BTU/hr
0631-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		664000 BTU/hr
0800-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		299000 BTU/hr
1111-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		70000 BTU/hr
1159-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		250000 BTU/hr
1160-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		162000 BTU/hr
1600-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		907800 BTU/hr
1600-ICU-02	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		675000 BTU/hr
1601-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
1626-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		620000 BTU/hr
1628-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
1756-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		3450 BTU/hr
1985-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1559000 BTU/hr
1985-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		1559000 BTU/hr
2132-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		702000 BTU/hr
2132-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2145-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		455000 BTU/hr
2145-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2164-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		96000 BTU/hr
2164-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2165-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2165-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		90000 BTU/hr
2166-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		70000 BTU/hr
2167-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		180000 BTU/hr
2200-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		396600 BTU/hr
2301-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		216000 BTU/hr
2328-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		135000 BTU/hr
2333-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		667000 BTU/hr
2335-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2336-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2337-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2338-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		135000 BTU/hr
2339-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2340-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2341-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2342-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2343-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2345-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		299000 BTU/hr
2346-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		352000 BTU/hr
2346-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		440000 BTU/hr
2347-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		352000 BTU/hr
2348-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2349-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2350-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
2351-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2352-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2353-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2354-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2366-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		900000 BTU/hr
2366-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		900000 BTU/hr
2367-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2367-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2367-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2367-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2367-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2381-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1000000 BTU/hr
2385-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1000000 BTU/hr
2411-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2411-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		1582000 BTU/hr
2415-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1139000 BTU/hr
2415-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
2417-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1139000 BTU/hr
2417-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
2422-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		130000 BTU/hr
2428-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		369600 BTU/hr
2434-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		480000 BTU/hr
2447-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2447-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2447-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		120000 BTU/hr
2448-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		38000 BTU/hr
2448-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		240000 BTU/hr
2566-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		750000 BTU/hr
2566-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		2000000 BTU/hr
2605-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
2606-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2607-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		140000 BTU/hr
2616-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		191000 BTU/hr
2638-ICU-01	Propane combustion unit	9 VAC 5-80-720 C		133000 BTU/hr
2641-ICU-01	Propane combustion unit	9 VAC 5-80-720 C		192000 BTU/hr
2642-ICU-01	Propane combustion unit	9 VAC 5-80-720 C		257000 BTU/hr
2801-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2801-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2802-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2802-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2803-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2803-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2804-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2804-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2805-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2805-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2806-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2806-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2807-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
2807-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2808-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2808-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2809-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2809-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2810-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2810-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2811-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2811-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2812-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2812-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2813-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2813-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2814-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2814-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2815-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2815-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2816-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2816-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2817-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2817-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2818-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2818-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2819-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2819-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2820-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2820-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2821-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2821-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2822-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2822-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2823-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2823-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2824-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2824-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2825-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2825-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2826-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2826-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2827-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2827-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2828-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2828-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
3480-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		316800 BTU/hr
3755-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		930 BTU/hr
3761-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		2484000 BTU/hr
3761-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		2484000 BTU/hr
3761-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		6100000 BTU/hr
3761-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		6100000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
3761-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		600000 BTU/hr
3761-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		600000 BTU/hr
5262-ICU-01	Nat. gas & #2 fuel oil combustion unit	9 VAC 5-80-720 C		750000 BTU/hr
5262-ICU-02	Nat. gas & #2 fuel oil combustion unit	9 VAC 5-80-720 C		600000 BTU/hr
5271-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		645000 BTU/hr
5561-ICU-01	Nat. gas & #2 fuel oil combustion unit	9 VAC 5-80-720 C		950000 BTU/hr
0094-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		60 kW
0122-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		20 kW
0125-IEG-01R	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		300 kW
0126-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		18 kW
0207-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		200 kW
0207-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		200 kW
0210-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		300 kW
0210-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		260 kW
0210-IEG-03	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		175 kW
0228-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		60 kW
0256-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		400 kW
0256-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		128 kW
0396-IEG-01	Nat. gas emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		40 kW
0401-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		225 kW
0527-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		200 kW
0528-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		75 kW
0534-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		125 kW
0552-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		300 kW
0555-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		35 kW
0580-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		420 kW
0627-IEG-01	Nat. gas emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		33 kW
1143-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		250 kW
1148-IEG-01	Diesel emergency Fire Pump (<500 hr/yr)	9 VAC 5-80-720 C		113 hp

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
1154-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		91 kW
1157-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		400 kW
1172-IEG-03	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		260 kW
1172-IEG-05	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		175 kW
1176-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		50 kW
1176-IEG-02	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		150 kW
1181-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		250 kW
1196-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		150 kW
1600-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		60 kW
1600-IEG-02	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		60 kW
1697-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		276 kW
1985-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		400 kW
1994-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		400 kW
2385-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		470 kW
5271-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		100 kW
5307-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		81 kW
5307-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		300 kW
5307-IEG-03	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		355 kW
5502-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		25 kW
5506-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		15 kW
5576-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		50 kW
5576-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		90 kW
7103-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		450 kW
7147-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		150 kW
7533-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		175 kW
7533-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		150 kW
0596-PRI-02	Printing operations	9 VAC 5-80-720 B	VOC	

Petroleum Storage Tanks

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-8—720 B)
Free-Standing Aboveground Storage Tanks						
A7103-6	180	Steel DW	Heating	kerosene	9 VAC 5-8—720 B	VOC
A126-1	275	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1148-1	275	Steel	fire pump	Diesel	9 VAC 5-8—720 B	VOC
A1157-1	550	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A527-1	550	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A580-2	1,000	Steel DW	Boiler/Gen	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
A1628-1	550	Steel DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
A1626-1	1,000	Steel DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
A1600-1	275	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1600-2	100	Steel	Motor fuel	Gasoline	9 VAC 5-8—720 B	VOC
A583-1	550	Steel	waste oil	waste oil	9 VAC 5-8—720 B	VOC
A5576-6	550	Steel DW	motor fuel	Diesel	9 VAC 5-8—720 B	VOC
A256-2	550	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A256-1	650	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A228-1	550	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A228-2	550	Steel DW	Motor fuel	Diesel	9 VAC 5-8—720 B	VOC
A0597-1	100	Steel DW	Motor fuel	Diesel	9 VAC 5-8—720 B	VOC
A210-2	550	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A2381-1	550	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A207-1	530	Steel DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
Underground Storage Tanks						
U631-2	1,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U7103-5	5,000	Fiberglass DW	Generator (2)	Diesel	9 VAC 5-8—720 B	VOC
U7103-8	20,000	Steel DW Fiberglass coated	Heating	#6 Fuel Oil	9 VAC 5-8—720 B	VOC
U7103-7	20,000	Steel DW Fiberglass coated	Heating	#6 Fuel Oil	9 VAC 5-8—720 B	VOC
U1196-2	1,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1142-2	4,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1176-2	1,000	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1172-2	1,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1181-2	550	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1143-2	1,500	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1985-2	1,000	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
U7147-2	550	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1150-1	6,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-8—720 B)
U1150-2	15,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U580-3	2,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U603-2	1,000	Steel	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U1600-2	4,000	Steel	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U1600-1	6,000	Fiberglass	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U7533-6	10,000	Fiberglass DW	Boiler/Gen	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U7533-5	20,000	Fiberglass DW	Boiler/Gen	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U5561-1	4,000		Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U228-4	10,000	Steel coated with fiberglass	Motor fuel	Gasoline	9 VAC 5-8—720 B	VOC
U583-2	10,000	Steel coated with fiberglass	Motor fuel	Diesel	9 VAC 5-8—720 B	VOC
U583-1	10,000	STIP3	Motor fuel	Gasoline	9 VAC 5-8—720 B	VOC
U2616-2	1,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U5576-4	3,000	Steel StiP3	Gen-Boiler	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U263-2	2,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U331-1	550	Steel	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U334-2	5,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U5262-1	5,000	Steel	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U231-2	2,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC

Above Ground Storage Tank Integral to Generators

A0094-1	225	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A125-1	75	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A0068-1	500	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A7185-1	2,400	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1994-1	750	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1155-1	1,100	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1154-1	200	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1176-1	75	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A3761-1	1,695	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A0401-1	110	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A534-1	100	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1600-3	112	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A2462-1	112	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A550-2	500	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5576-7	224	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-8—720 B)
A5271-1	250	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A210-4	300	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A210-1	150	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A210-3	100	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5307-3	500	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5307-2	500	Steel SW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5307-1	250	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A207-2	380	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC

Aboveground Day Tanks for Generators

D7103-2	100	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
D1196-1	100	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
D1985-1	100	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
D1150-2	275	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
D1150-1	300	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
D256-1	118	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

XI. Compliance Plan

A. Description of Compliance Requirements

The permittee is subject to the compliance schedule described in the Executive Compliance Agreement between UVA and DEQ (Appendix A) in addition to the milestone dates in Section XI.B. The schedule includes remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule resembles and is at least as stringent as that contained in any judicial consent decree or Board order to which the source is subject. This schedule is supplemental to, and does not sanction noncompliance with the applicable requirements upon which it is based.
(9 VAC 5-80-90 I.3.c)

B. Compliance Schedule

1. By January 1, 2005, the permittee shall provide to DEQ confirmation of the date by which contracts for emission control systems or process modifications are to be awarded, or confirmation of the date by which orders are to be issued for the purchase of component parts to accomplish emission control or process modification.
(9 VAC 5-80-110 K.3)

2. By March 1, 2005, the permittee shall begin on-site construction or installation of emission control equipment or process change.
(9 VAC 5-80-110 K.3)

3. By June 1, 2008, the permittee shall have completed on-site construction or installation of emission control equipment or process modification.
(9 VAC 5-80-110 K.3)

4. By October 1, 2008, the permittee shall have achieved final compliance.
(9 VAC 5-80-110 K.3)

C. Reporting Requirements

Within 14 days of the dates provided in Section XI..B, the permittee shall provide written confirmation that the milestone has been achieved. If the milestone is not achieved by the date required in the compliance schedule, the source shall, within 14 days of the date, provide a written explanation of the reason the compliance date was not met, a proposed alternate date and a statement as to the impact on the final compliance date. Extension of a compliance date may be cause for modification of this permit.
(9 VAC 5-80-110 K.4)

D. Certified Progress Report

The permittee shall submit a certified progress report quarterly detailing the progress made toward completion of the milestones in Section XI.B. The progress report must be certified by a responsible official and shall contain the following:

1. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

2. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

(9 VAC 5-80-90 I.4 and 9 VAC 5-80-110 K.4)

XII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None Identified	-	-

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

XIII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

This permit shall become invalid five years from the date of issuance. The permittee shall submit an application for renewal of this permit no earlier than 18 months and no later than six months prior to the date of expiration of this permit. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the DEQ on the renewal application.
(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

   f. The operating conditions existing at the time of sampling or measurement.

   (9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
   (9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

      (1) Exceedance of emissions limitations or operational restrictions;

      (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

      (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

   c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

   (9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Valley Region, within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XI.C.3 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Director, Valley Region, within four (4) daytime business hours of the occurrence. In addition, the owner shall provide a written statement, within 14 days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shutdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the board.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

J. Permit Action for Cause

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
   (9 VAC 5-80-110 G.4)

2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:

   a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;

   b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;

c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase in authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;

d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;

e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;

f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);

g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether

acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

   b. The permitted facility was at the time being properly operated.

   c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.

   d. The permittee notified the board of the malfunction within two working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Statements for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

EXECUTIVE COMPLIANCE AGREEMENT

The Rector and Visitors of the University of Virginia
Charlottesville, Virginia
Main Heating Plant

Registration # 40200

Effective date: Later date of signatories, page 4

Purpose and authority

This is an Executive Compliance Agreement (Agreement) between the University of Virginia (UVA) and the Virginia Department of Environmental Quality (DEQ) pursuant to the Director's authority, as set forth in Sections 10.1-1186(2) and 10.1-1192 of the Code of Virginia, to administer and enforce the Air Pollution Control Law and regulations. The purpose of this Agreement is to address past and present air emissions and throughput exceedances of existing air permit limitations, identified below, and to allow for pollution control upgrades and modifications of UVA's Main Heating Plant (MHP), by establishing interim fuel throughput limits, emissions limits, and recordkeeping requirements during the air permit application and construction phases of the MHP project.

Laws and regulations

UVA's MHP is subject to Title 9, No. 5 of the Virginia Administrative Code. Pursuant to Title 23, Chapter 9 of the Code of Virginia, the Rector and Visitors of UVA are vested with the authority and responsibility to govern UVA. Nothing in this Agreement shall operate to limit such authority of the Rector and Visitors or otherwise violate the laws of the Commonwealth.

Specific Conditions #5 through #7 of Part I of UVA's permit to construct, modify and operate the MHP, effective August 5, 1994 (1994 MHP permit), Specific Conditions #4 through

#6 of Part I of UVA's permit amendment to construct, modify and operate the MHP, effective March 5, 1995 (1995 MHP permit amendment) provide the applicable emissions/fuel throughput limitations for UVA's MHP. Specific Condition #4 of the 1995 MHP permit amendment describes the fuel allowances for each boiler and the total combined heat input allowances (Btu).

Furthermore, Specific Conditions #4 and #5 of Part I of UVA's permit to construct and operate coal handling, unloading and storage facilities, effective February 14, 1986 (1986 coal handling permit or CHP), set coal throughput limitations at the facility's coal handling facility. Specific Condition #3 of the 1986 CHP also allows for the construction of seven coal silos. UVA elected to install four of the seven silos. All of the terms and conditions of both permits, except as modified by Appendix A, shall continue in effect subsequent to the execution of this Agreement, until execution of a new permit, where the new terms and conditions shall apply.

Compliance and enforcement history

UVA's MHP on Jefferson Park Avenue operates two coal-fired boilers (boilers #1 and #3), two coal/gas-fired boilers (boilers #2R and #5), and one oil/gas-fired boiler (boiler #4). In accordance with Specific Condition #16 of the 1994 MHP permit, a continuous emission monitor system (CEMS) has been installed to measure and record the opacity from the boiler exhaust stack. In addition, a CEMS has been installed to measure and record the concentration of NO_X emitted from the exhaust stack of boilers #2R and #5, in accordance with Part I Specific Condition #17 of the 1994 MHP permit.

In 1993, DEQ issued a Notice of Violation (NOV) to UVA for late and allegedly deficient CEMS reports, failure to submit quarterly emissions reports, and for fuel use exceedences on boilers #1, #3, and #4 that occurred in 1992. A Consent Order (CO) intended to resolve the allegations on the 1993 NOV was entered into by UVA and DEQ and was terminated on June 30, 1998.

In 1995, DEQ issued a second NOV to UVA for allegedly deficient excess emissions reports, coal fuel use exceedence on boiler #3 and failure to provide minimum valid capture data for NO_X emissions on boiler #2R. Also in 1995, DEQ issued a Letter of Admonition for failing to meet the deadline for completing the CEMs unit replacement. A CO intended to resolve the allegations in the 1995 NOV was entered into by UVA and DEQ and was terminated on March 14, 1996.

In 1996, DEQ issued a third NOV to UVA for exceeding the sulfur content for residual oil burned in the #4 boiler, exceeding the percentage ash content of a shipment of coal burned at the facility in 1995, exceeding the coal throughput limitation at the truck unloading station in 1995, and exceeding the fuel allowance for coal burned as well as the total combined heat input allowance for boiler #5. Specifically, UVA was alleged to be exceeding throughput limits as set

out in Part I Specific Condition #4 of the 1995 MHP permit amendment and Part I Specific Condition #5 of the 1986 CHP.

A Consent Order intended to address the 1996 NOV was entered into between DEQ and UVA effective December 13, 1996, that required the completion of supplemental environmental projects (SEPs) and the submittal of a revised PSD permit application. UVA submitted a PSD air permit application dated September 10, 1996, which was subsequently cancelled by the submittal of a new PSD air permit application dated October 25, 2001. In May 2002, UVA embarked on an update of its heating master plan, which included an evaluation of technically feasible pollution control equipment for its existing boilers. As a result of that effort, UVA submitted a third air permit application dated March 31, 2003. UVA completed the SEPs as required by the 1996 Consent Order. On April 1, 2004, UVA submitted a revised air permit application for modifications to the MHP. The application was dated by UVA on March 31, 2004.

On January 29, 2003, DEQ issued a fourth NOV to UVA for three alleged violations of the State Air Pollution Control Law and regulations for certain events occurring at UVA's MHP on January 15 through January 17, 2003:

1. Data from the MHP's CEMS indicated that on January 15, 2003, there occurred an opacity exceedence of 48.1% for a 1 ½ -hour duration during startup/shutdown procedures stemming from the startup of the facility's Boiler #3. UVA failed to notify DEQ of the opacity exceedence within four business hours, in apparent violation of section 9 VAC 5-20-180.C.

2. Data from the MHP's CEMS indicated that on January 16, 2003, there were two hours and six minutes (8:00 p.m. through 10:06 p.m.) of excess opacity with an average magnitude of 71.9%, which was not attributable to startup, shutdown, or malfunction. The opacity readings were in excess of the permitted standards set out in sections 9 VAC 5-40-80 and 5-40-940.B. Contemporaneous with this event, there was a major downwash of coal soot upon a portion of the City of Charlottesville in the immediate vicinity of UVA's MHP. This resulted in part from the operation of the MHP under unusual emergency conditions.

3. Data from the MHP's CEMS indicated that on January 16, 2003, there began four hours and twenty-four minutes (10:12 p.m. on January 16, 2003 through 2:36 a.m. on January 17, 2003) of excess opacity with an average magnitude of 33.3%, which was also not attributable to startup, shutdown, or malfunction. The opacity readings were in excess of the permitted standards set out in sections 9 VAC 5-40-80 and 5-40-940.B. This was caused in part from the same emergency.

The emergency that resulted in the alleged violations on January 15 through January 17, 2003 was caused by the consecutive failures of Boilers # 2R and #5, the MHP's two newest and largest boilers. To protect patient care at the University Hospital, UVA took the following mitigating steps during this period to immediately repair a failed tube and to shed load from its MHP:

1. UVA contacted a vendor to make emergency repairs. The vendor mobilized his crew and was at the plant (coming from Richmond during a night time snow event) within three hours of the call.

2. UVA shut off heat to certain buildings and shut down air handling units in buildings that could be controlled remotely. Opacity declined significantly within 1½ hours of this action being initiated.

3. For those buildings and systems that could not be remotely controlled, UVA mobilized crews in UVA's Health System and Academic areas to manually shut down heat to larger buildings and manually shut down air handling units and converters.

4. UVA reduced heating hot water distribution temperature by 22%.

To remedy the alleged violations contained in the January 29, 2003 NOV, as well to resolve the pending actions from the third NOV, UVA agrees to undertake the actions and schedule of compliance set out in Appendix A of this Agreement. Acceptance of this Agreement shall terminate the Consent Order issued to UVA on December 13, 1996. Termination provisions are set out in Section D of Appendix A, below.

This Agreement and Appendix A shall become effective upon the date of its execution by the Director of the Department of Environmental Quality or his designee.

Leonard W. Sandridge — *8/4/2004*
Leonard W. Sandridge, — Date
Executive Vice President and
Chief Operating Officer,
The University of Virginia

R. Bradley Chewning for — *8/3/2004*
Robert Burnley, Director — Date
Va. Department of Environmental Quality

APPENDIX A

I. UVA agrees to the following corrective actions to address certain violations specified in the NOV issued on January 29, 2003:

A. UVA shall keep a notice posted in the MHP control room providing instructions to operators to contact DEQ via facsimile whenever opacity exceeds 20% or more for over an hour even if occurring during startup, shutdown, or malfunction. Furthermore, the notice shall provide that DEQ shall be contacted any time opacity exceeds 60% for a six-minute average (when boilers 1, 3 and 4 are operating by themselves) or any time opacity exceeds 27% when boiler 5 is operating by itself or in conjunction with any other boiler, or any time opacity exceeds 30% when boiler 2R is operating by itself or in conjunction with boilers 1, 3, or 4. Startup and shutdown exemptions are only allowable during periods that boilers 2R and 5 are operating without boilers 1, 3 and 4. To facilitate the reporting requirements, UVA will track the specific boilers including fuel type for each boiler operating at any point in time and indicated this information in any required reports indicating status of emissions. Shift operators shall check the CEMS and the logbook at the beginning of each shift to ensure that proper notifications have been made to DEQ, if necessary. UVA shall train all boiler operators to follow this procedure.

B. UVA has added appropriate alarms and instructions to UVA's CEMS software, including the requirement to indicate which boilers are burning fuel at the time of the exceedence.

II. UVA agrees to the following schedule of compliance to address the planned upgrades and boiler modifications of the MHP:

A. UVA shall utilize natural gas as needed to ensure that emissions limits are not exceeded during any 12-month period on a rolling basis.

B. UVA shall comply with interim fuel throughput limits, emissions limits, and recordkeeping requirements as set out in Section C, below, during the design and construction phases as set out in this schedule. As new and modified equipment comes online, UVA and DEQ agree to reevaluate these limits and amend this Agreement as appropriate. These interim limits and reporting requirements shall replace the language in Specific Conditions #5 through #7, #11, #13 and #20 of Part I of UVA's 1994 MHP permit, Specific Conditions #4 through #6 of Part I of UVA's 1995 MHP permit amendment and Specific Conditions #4 and #5 of the 1986 CHP. All other permit Conditions and requirements shall continue to apply unless otherwise stated herein.

C. Boiler modification and construction of air pollution controls, schedule incorporated by reference. UVA has submitted a Form 7 on April 1, 2004, with supporting documentation. The terms and conditions of the Form 7 application are incorporated herein by reference.

III. UVA agrees to the following interim operating scenario and interim fuel throughput limits during construction and upgrades to the MHP:

These interim limitations, recordkeeping and reporting requirements correspond to Specific Conditions #5 through #7, #11, #13 and #20 of Part I of UVA's 1994 MHP permit, Specific Conditions #4 through #6 of Part I of UVA's 1995 MHP permit amendment and Specific Conditions #4 and #5 of the 1986 CHP.

A. Limitations

1. Each boiler (including existing units) shall consume no more than the following amounts of fuel on an annual basis:

Boiler Number	Approved Fuel Type	Quantity Allowed
1(1)	Coal	0 tons/yr
2R & 5(2)	Coal	24,000 tons/yr
	Natural Gas	$1,444 \times 10^6$ SCF
3(3)	Coal	4,515 tons/yr
4	#6 Oil	70,150 gallons
	Natural Gas	150.0×10^6 SCF

(1) Boiler #1 shall remain off-line, with the former total allowable limit of 515 tons coal/yr now assigned Boiler #3 for a total 4,515 tons/yr. Boiler #1 may be used in emergency situations only, with emissions and throughput effects deducted from allowables to Boiler #3 in these circumstances.

(2) The combination of coal and natural gas burned in Boilers #2R and #5 shall not to exceed 1.516×10^{12} Btu/year.

(3) Any of the coal assigned to Boiler #3 and not used in that boiler may be reassigned to Boilers #2R and/or #5. See also Condition III.A.3 of Appendix A below.

2. Short-term emissions from the operation of each boiler shall not exceed the limits specified below:

	PM	SO2	NO_X	CO	VOC
1(1)	0.00 lbs/MMBtu	0.00 lbs/MMBtu	0.00 lbs/MMBtu	0.00 lbs/MMBtu	N/A
	0.00 lbs/hr	0.00 lbs/hr	0.00 lbs/hr	0.00 lbs/hr	0.00 lbs/hr
2R	0.05 lbs/MMBtu	1.64 lbs/MMBtu	0.60 lbs/MMBtu	0.19 lbs/MMBtu	N/A
	4.75 lbs/hr	155.94 lbs/hr	57.00 lbs/hr	18.25 lbs/hr	0.52 lbs/hr
3	0.43 lbs/MMBtu	1.64 lbs/MMBtu	0.60 lbs/MMBtu	0.19 lbs/MMBtu	N/A
	38.86 lbs/hr	147.64 lbs/hr	53.94 lbs/hr	16.90 lbs/hr	0.24 lbs/hr

	PM	SO2	NO_X	CO	VOC
4	0.14 lbs/MMBtu	1.99 lbs/MMBtu	0.52 lbs/MMBtu	0.04 lbs/MMBtu	N/A
	15.80 lbs/hr	223.7 lbs/hr	58.50 lbs/hr	4.50 lbs/hr	0.59lbs/hr
5	0.05 lbs/MMBtu	1.64 lbs/MMBtu	0.60 lbs/MMBtu(2) 0.20 lbs/MMBtu(3)	0.19 lbs/MMBtu	N/A
	5.63 lbs/hr	184.77 lbs/hr	67.51 lbs/hr	21.15 lbs/hr	0.59 lbs/hr

(1) Boiler #1 shall remain off-line, except under emergency conditions as indicated in #1, footnote #1, above.
(2) Coal emission limit.
(3) Natural gas emission limit.

3. Annual emissions from the operation of the boilers shall not exceed the limitations specified below:

	PM	SO2	NO_X	CO	VOC
1(1)	0.00 tons/yr	0.00 tons/yr	0.00 tons/yr	0.00 tons/yr	0.00 tons/yr
2R& 5	15.96 tons/yr	523.49 tons/yr	191.52 tons/yr	60.65 tons/yr	3.97 tons/yr
3(2)	27.02 tons/yr	98.48 tons/yr	36.03 tons/yr	11.41 tons/yr	0.11 tons/yr
4	1.31 tons/yr	11.05 tons/yr	23.74 tons/yr	6.51 tons/yr	0.42 tons/yr

(1) Boiler #1 will remain off-line, except under emergency conditions as indicated in #1, footnote #1, above.
(2) Any coal reallocated from Boiler #3 to Boilers #2R and/or #5 shall not result in exceedence of the combined totals of each pollutant listed above for Boilers #2R, 3, and 5.

4. Emissions from the MHP stack (Stack Ref. 7103-1) shall not exceed the following limits, except as specified below:

Particulate Matter	48.3 lbs/hr
Sulfur Dioxide	223.7 lbs/hr

Exceedance of the emission limits shall be permitted under the following conditions only:

a. Gas service to the plant is interrupted by the City of Charlottesville.

b. An “emergency” or “malfunction” occurs as defined by 9 VAC 5 Chapter 10 of the State Regulations for the Control and Abatement of Air Pollution.

5. UVA shall furnish notification to the DEQ of each exceedance of the emission limits in Condition III.A.4 of Appendix A of this Agreement, by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows UVA to comply with the deadline. Such notification shall be made as soon as practicable but not later than four daytime business hours after the exceedance is discovered. The notification shall provide all pertinent facts, including the estimated duration of the exceedance. When the condition causing the exceedance has been corrected, UVA shall notify the DEQ.

6. The residual oil to be burned in Boiler 4 (Ref. 7103-1-04) shall meet the specifications below:

   RESIDUAL OIL which meets the ASTM specifications for numbers 4, 5, or 6 fuel oil:
   Average sulfur content per shipment: 1.9%

7. UVA shall determine compliance with the hourly sulfur dioxide (SO_2) and particulate matter (PM-10) emission limits in Condition III.A.4 of Appendix A of this Agreement by operating no more than one boiler on coal or residual oil at any time, except during startup and shutdown situations where a coal or residual oil boiler is being taken off-line or switched to gas concurrently with the startup of a second boiler on coal or residual oil. UVA may also demonstrate compliance with the hourly sulfur dioxide (SO_2) and particulate matter (PM-10) emission limits in Condition III.A.4 of Appendix A of this Agreement when operating more than one boiler on coal or residual oil provided that hourly emissions calculations are performed as follows:

   a. The total SO_2 emission rate in pounds per hour from all boilers shall be calculated as follows:

$$SO_{2boiler} = \sum_{i=1}^{n} BC_i + \sum_{i=1}^{n} BR_i + \sum_{i=1}^{n} BG_i$$

……..……Equation 1

   Where:

   $SO_{2boiler}$ = Total SO_2 emission rate in pounds per hour from all boilers.

   BC_i = SO_2 emission rate in pounds per hour from each boiler (i) burning coal using DEQ-approved pollutant specific emission factors.

   BR_i = SO_2 emission rate in pounds per hour from each boiler (i) burning residual oil using DEQ-approved pollutant specific emission factors.

BG_i = SO_2 emission rate in pounds per hour from each boiler (i) burning natural gas using DEQ-approved pollutant specific emission factors.

b. The SO_2 emission rate resulting from burning of coal shall be calculated as follows:

$$BC_i = C_h * C_t * C_s \quad \text{.....Equation 2}$$

Where:

BC_i = SO_2 emission rate in pounds per hour from each boiler (i) burning coal.

C_h = Heat content of coal in million BTU per pound, calculated as a monthly average.

C_t = Coal throughput in pounds per hour, for each boiler (i).

C_s = the weighted average coal equivalent SO_2 content in pounds of SO_2 per million BTU, calculated as a monthly average.

c. The SO_2 emission rate resulting from burning of residual oil shall be calculated as follows:

$$BR_i = R_h * R_t * R_s \quad \text{.....Equation 4}$$

Where:

BR_i = SO_2 emission rate in pounds per hour from each boiler (i) burning residual oil.

R_h = Heat content of residual oil in million BTU per gallon, calculated as a monthly average.

R_t = Residual oil throughput in gallons per hour, for each boiler (i).

R_s = the weighted average residual oil equivalent SO_2 content in pounds of SO_2 per million BTU, calculated as a monthly average.

d. The SO_2 emission rate resulting from burning of natural gas shall be calculated as follows:

$$BG_i = G_h * G_t * G_s \quad \text{.....Equation 5}$$

Where:

BG_i = SO_2 emission rate in pounds per hour from each boiler (i) burning natural gas.

G_h = Heat content of natural gas in million BTU per cubic foot, calculated as a monthly average.

G_t = Natural gas throughput in cubic feet per hour, for each boiler (i).

G_s = the weighted average natural gas equivalent SO_2 content in pounds of SO_2 per million BTU, calculated as a monthly average.

e. The total PM-10 emission rate in pounds per hour from all boilers shall be calculated as follows:

$$PM_{boiler} = \sum_{i=1}^{n} BC_i + \sum_{i=1}^{n} BR_i + \sum_{i=1}^{n} BG_i$$

……..…Equation 6

Where:

PM_{boiler} = Total PM-10 emission rate in pounds per hour from all boilers.

BC_i = PM-10 emission rate in pounds per hour from each boiler (i) burning coal using DEQ-approved pollutant specific emission factors.

BR_i = PM-10 emission rate in pounds per hour from each boiler (i) burning residual oil using DEQ-approved pollutant specific emission factors.

BG_i = PM-10 emission rate in pounds per hour from each boiler (i) burning natural gas using DEQ-approved pollutant specific emission factors.

f. The PM-10 emission rate resulting from burning of coal shall be calculated as follows:

$$BC_i = C_h * C_t * C_p$$

…….Equation 7

Where:

BC_i = PM-10 emission rate in pounds per hour from each boiler (i) burning coal.

C_h = Heat content of coal in million BTU per pound, calculated as a monthly average.

C_t = Coal throughput in pounds per hour, for each boiler (i).

C_p = the weighted average coal equivalent PM-10 content in pounds of PM-10 per million BTU, calculated as a monthly average.

g. The PM-10 emission rate resulting from burning of residual oil shall be calculated as follows:

$$BR_i = R_h * R_t * R_p \qquad \text{.....Equation 9}$$

Where:

BR_i = PM-10 emission rate in pounds per hour from each boiler (i) burning residual oil.

R_h = Heat content of residual oil in million BTU per gallon, calculated as a monthly average.

R_t = Residual oil throughput in gallons per hour, for each boiler (i).

R_p = the weighted average residual oil equivalent PM-10 content in pounds of PM-10 per million BTU, calculated as a monthly average.

h. The PM-10 emission rate resulting from burning of natural gas shall be calculated as follows:

$$BG_i = G_h * G_t * G_p \qquad \text{.....Equation 10}$$

Where:

BG_i = PM-10 emission rate in pounds per hour from each boiler (i) burning natural gas.

G_h = Heat content of natural gas in million BTU per cubic foot, calculated as a monthly average.

G_t = Natural gas throughput in cubic feet per hour, for each boiler (i).

G_p = the weighted average natural gas equivalent PM-10 content in pounds of PM-10 per million BTU, calculated as a monthly average.

8. The MHP shall not conduct more than one of the following coal handling activities at any given time:

   a. Coal loading to trucks.

   b. Coal unloading from trucks.

   c. Coal unloading building operations.

9. UVA and DEQ shall follow DEQ's notification policy as set out in DEQ's "Policy on Excess Opacity During Startup and Shutdown Events at Existing Units" memo regarding enforcement discretion, dated April 2, 2003, and Part III of the March 20, 2003 revision of DEQ's Field Operations Manual for Air Inspectors (ASOP-3), in the event that an opacity exceedence is detected during the startup or shutdown of existing Boilers #1, 3, or 4.

10. This scenario shall terminate no later than October 1, 2008, or earlier at DEQ's discretion if a DEQ-approved phasing-in plan is adopted, whereupon the new permit conditions shall apply.

B. Recordkeeping

The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this Agreement. In addition to the recorkeeping requirements contained in the 1994 MHP permit, the 1995 MHP permit amendment, the 1986 CHP and the Title V permit, UVA shall keep the following records.

1. The monthly and annual throughput of coal (tons), natural gas (million cubic feet), residual oil (gallons) and fuel heat input (MMBtu/hr) as applicable for each combination of boilers (Ref. 7103-1-01, 7103-1-2R, 7103-1-03, 7103-1-04 and 7103-1-05) necessary to demonstrate compliance with Condition III.A.1 of Appendix A of this Agreement. The annual throughputs shall be calculated monthly as the sum of each consecutive 12-month period. Compliance with this condition is required beginning on August 1, 2003, which commences the initial 12-month period.

2. Annual particulate matter, PM-10, sulfur dioxide, nitrogen oxides (as NO_2), VOC and carbon monoxide emission calculations (in tons) for each combination of boilers (Ref. 7103-1-01, Ref. 7103-1-2R, 7103-1-03, 7103-1-04 and Ref. 7103-1-

05) necessary to demonstrate compliance with Condition III.A.3 of Appendix A of this Agreement, calculated monthly as the sum of each consecutive 12-month period, using calculation methods approved by the Director, Valley Region. Compliance with this condition is required beginning on August 1, 2003, which commences the initial 12-month period.

3. Hourly PM-10 and sulfur dioxide emissions calculations (in pounds) for the MHP stack (Stack Ref. 7103-1) necessary to demonstrate compliance with Condition III.A.4 as required by Condition III.A.7 of Appendix A of this Agreement, using calculation methods approved by the Director, Valley Region. Compliance with this condition is required beginning with the first full month following the effective date of this Agreement.

4. A log of coal handling activities including the date, time, and name of person performing each coal handling activity. Compliance with this condition shall be required beginning with the first full month following the effective date of this Agreement.

5. A log of each boiler and fuel type operating at any time, including the date and time each boiler is placed on-line or taken off-line. Compliance with the requirement to track fuel type shall be required beginning with the first full month following the effective date of this Agreement. Compliance with the condition to track on-line boilers is required beginning on August 1, 2003.

6. A log of exceedances of the emission limits in Condition III.A.4 of Appendix A of this Agreement. Compliance with this requirement shall be required beginning with the first full month following the effective date of this Agreement.

These records shall be available on site for inspection by the DEQ for the duration of this Agreement.

IV. Administrative provisions

A. If UVA's revised permit application is either denied by any authority, not submitted by UVA, or not acted upon by DEQ by March 31, 2005, then this Agreement will immediately terminate.

B. This agreement may not be modified or amended without written consent of both parties. The parties agree to consult in good faith as conditions may require. The purpose of this provision is to recognize that this is a process-based schedule spanning several years that may require occasional adjustments based on unforeseen and unforeseeable future events. Alteration of the Form 7 schedule shall not invalidate other provisions in this Agreement.

C. The inability of UVA to meet a scheduled deadline shall not result in the automatic termination of this Agreement, excluding IV.A above. A discussion between DEQ and UVA shall be held at the earliest practicable date when a delay has occurred or is expected to occur in order to discuss compliance issues, revising the schedule, future schedule deadlines, and the possible termination of this Agreement.

D. DEQ and UVA understand and agree that, unless provided herein, this Agreement does not alter, modify, or amend any other existing permit term or condition.

E. In addition to the reporting requirements as set out in Section III above, UVA shall submit quarterly progress reports.

F. UVA shall schedule a progress review meeting with DEQ at least annually to evaluate current progress, discuss scheduled deadlines for the forthcoming year, and determine whether amendment to this Agreement is necessary.

G. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of NOVs or ECAs as appropriate by the State Air Pollution Control Board as a result of violations.

H. Nothing herein shall affect any appropriate enforcement actions by any other federal, state, or local regulatory authority.

I. This Agreement shall terminate upon the implementation of the applicable terms and conditions of the new permit or pursuant to the terms of IV.A, above. Determination of any shake-down period following completion of construction shall be made within ten days of completion of such construction, upon consultation of both parties to this Agreement.